

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



Company Information

Company Name: **EnCana Oil & Gas (USA) Inc.**

Gas STAR Contact: **Scott Mason**

Title **EHS Coordinator**

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State: **CO**

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Company Information Updated: **No**

Activities Reported

BMP1: Yes BMP2: No BMP3: Yes

Total Methane Emission Reductions Reported This Year: **6,895,123**

Previous Years' Activities Reported: **No**

Period Covered by Report

From: **01/01/2009**

To: **12/31/2009**

☒ I hereby certify the accuracy of the data contained in this report.

Additional Comments

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BMP1: Identify and Replace High-Bleed Pneumatic Devices

Current Year Activities

A. Facility/location identifier information:

US Division

B. Facility Summary

Number of devices replaced this reporting period: _____ devices
Percent of system now equipped with low/no-bleed units: _____ %

C. Cost Summary

Estimated cost per replacement (including equipment and labor): \$ _____

D. Methane Emissions Reduction

Method Used: **Other**

Data Source: **Not Applicable**

Methane Emissions Reduction: **285,563 Mcf/year**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year: ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration (BMP 1 has a sunset period of 7 years).

Partner will report this activity annually up to allowed sunset date.

F. Total Value of Gas Saved

Value of Gas Saved: **\$ 1,427,815**

\$ / Mcf used: **\$ 5.00**

G. Planned Future Activities

Number of high-bleed devices to be replaced next year: _____ devices

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Previous Years' Activities

| Year | Number of Devices Replaced | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of replacements (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: gas lift (10 years)

Please describe how your company implemented this PRO:

Use gas lift in areas where high pressure gas lines exist.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **79,497 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Used same calculation as used for plunger lifts because they both reduce well blowdowns.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 556,479**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: install plunger lifts (10 years)

Please describe how your company implemented this PRO:

Common practice installation.

C. Level of Implementation

Other: Reporting on total number of plunger lifts for all of Encana US Division.

D. Methane Emissions Reduction

Methane Emissions Reduction: **1,541,051 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Calculation provided by Gas Star.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

☒ Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ **7,705,255**

\$ / Mcf used: \$ **5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Consolidate multiple facilities to a single one.

Please describe how your company implemented this PRO:

Redirect wells to centralized facilities.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **179,457 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Engineering estimates.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 897,285**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Convert gas pneumatic controls to instrument air (10 years)

Please describe how your company implemented this PRO:

Intalled air compressors at compressor stations.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **185,464 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 927,320**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Convert/install gas pneumatic chemical pumps with solar pumps.

Please describe how your company implemented this PRO:

Retro-fitting existing gas driven chemical pumps and installing solar pumps on new facilities.

C. Level of Implementation

Other: Several hundred throughout US Division.

D. Methane Emissions Reduction

Methane Emissions Reduction: **81,369 Mcf/year**

Basis for the emissions reduction estimate: **Calculation using manufacturer specifications**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

☒ Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 406,845**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **Install and replace as needed.**

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

DI&M: survey and repair leaks

Please describe how your company implemented this PRO:

Utilized FLIR camera and high-flow sampler to ID and quantify leaks. The reported values are for the TOTAL reductions for our US operations. We conduct DI&M at several hundred facilities so reporting savings from each one is not practical.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **137,056 Mcf/year**

Basis for the emissions reduction estimate: **Actual field measurement**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 685,280**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install electric compressors (10 years)

Please describe how your company implemented this PRO:

Ran power to facilities and set electric compressors.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **99,991 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 499,955**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install pilotless burner controls (10 years)

Please describe how your company implemented this PRO:

Replaced continuous gas pilots automatic pilots.

C. Level of Implementation

Number of units installed: 350 units

D. Methane Emissions Reduction

Methane Emissions Reduction: **282 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 1,410**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Perform reduced emissions completions

Please describe how your company implemented this PRO:

Use flow back separator to capture normally vented gas.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **4,265,282 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Engineering estimates.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 29,856,974**

\$ / Mcf used: **\$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **As practical for each operational area.**

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Replace compressor rod packing systems

Please describe how your company implemented this PRO:

Used FLIR camera to identify worn packing.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **14,334 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☒ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: **\$ 71,670**

\$ / Mcf used: **\$ 5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

US Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Replace gas starters with air (10 years)

Please describe how your company implemented this PRO:

Converted to air starts when installing air compressors at facilities.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **25,777 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ☒ Multi-year

If Multi-year:

- ☒ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ **128,885**

\$ / Mcf used: \$ **5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

| Year | Frequency of practice/activity or # of Installations | Total Cost * (\$) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved (\$) |
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* Total cost of practice/activity (including equipment and labor)

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Additional Accomplishments